

SVENSK STANDARD

SS-EN ISO 29767:2019



Fastställt/Approved: 2019-08-06
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 91.100.60; 91.120.10

Värmeisoleringsprodukter för byggnader – Bestämning av vattenabsorption vid partiell nedsänkning (ISO 29767:2019)

Thermal insulating products for building applications – Determination of short-term water absorption by partial immersion (ISO 29767:2019)

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-80014040>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Europastandarden EN ISO 29767:2019 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 29767:2019.

Denna standard ersätter SS-EN 1609:2013, utgåva 2

The European Standard EN ISO 29767:2019 has the status of a Swedish Standard. This document contains the official version of EN ISO 29767:2019.

This standard supersedes the SS-EN 1609:2013, edition 2

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Material och konstruktioner, SIS/TK 189/AG 01.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

EN ISO 29767

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2019

ICS 91.100.60

Supersedes EN 1609:2013

English Version

**Thermal insulating products for building applications -
Determination of short-term water absorption by partial
immersion (ISO 29767:2019)**

Produits isolants thermiques destinés aux applications du bâtiment - Détermination de l'absorption d'eau à court terme par immersion partielle (ISO 29767:2019)

Wärmedämmstoffe für das Bauwesen - Bestimmung der Wasseraufnahme bei kurzzeitigem teilweisem Eintauchen (ISO 29767:2019)

This European Standard was approved by CEN on 21 June 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

| Contents | Page |
|--|------------|
| European foreword | vii |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Principle | 1 |
| 5 Apparatus | 1 |
| 6 Test specimens | 3 |
| 6.1 Dimensions of test specimens..... | 3 |
| 6.2 Number of test specimens | 3 |
| 6.3 Preparation of test specimens..... | 3 |
| 6.4 Conditioning of test specimens..... | 3 |
| 7 Procedure | 3 |
| 7.1 Test conditions..... | 3 |
| 7.2 Test procedure | 3 |
| 7.2.1 Method A (drainage)..... | 3 |
| 7.2.2 Method B (deduction of initial water uptake) | 4 |
| 8 Calculation and expression of results | 4 |
| 9 Accuracy of measurement | 6 |
| 10 Test report | 6 |
| Bibliography | 8 |

European foreword

This document (EN ISO 29767:2019) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 88 "Thermal insulating materials and products" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2020, and conflicting national standards shall be withdrawn at the latest by January 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1609:2013.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 29767:2019 has been approved by CEN as EN ISO 29767:2019 without any modification.

Thermal insulating products for building applications — Determination of short-term water absorption by partial immersion

1 Scope

This document specifies the equipment and procedures for determining the short-term water absorption of specimens by partial immersion. It is applicable to thermal insulating products.

NOTE It is intended to simulate the water absorption caused by a 24 h raining period during construction work.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 29768, *Thermal insulating products for building applications — Determination of linear dimensions of test specimens*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

4 Principle

A test specimen is placed with its lower part in water, for a period of 24 h, and its change in mass is measured.

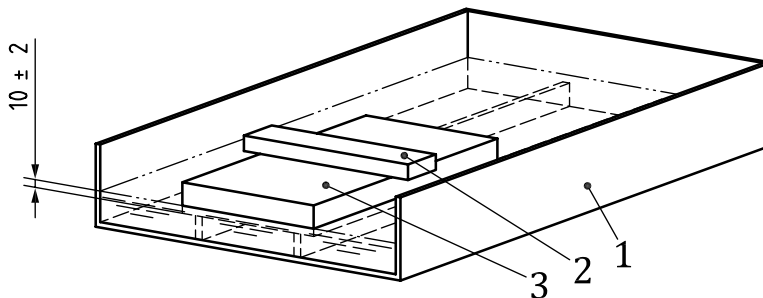
The excess water adhering to the surface but not absorbed by the test specimen is removed by drainage (method A) or taken into account by deduction of the initial water uptake (method B).

5 Apparatus

5.1 Balance, capable of determining the mass of a specimen to an accuracy of 0,1 g.

5.2 Water tank, with a device for keeping the water level constant to within ± 2 mm, and a device to keep the test specimen in position. The device to keep the test specimen in position shall not cover more

than 15 % of the cross-sectional area of the test specimen, which is exposed to water. An example is shown in [Figure 1](#).



Key

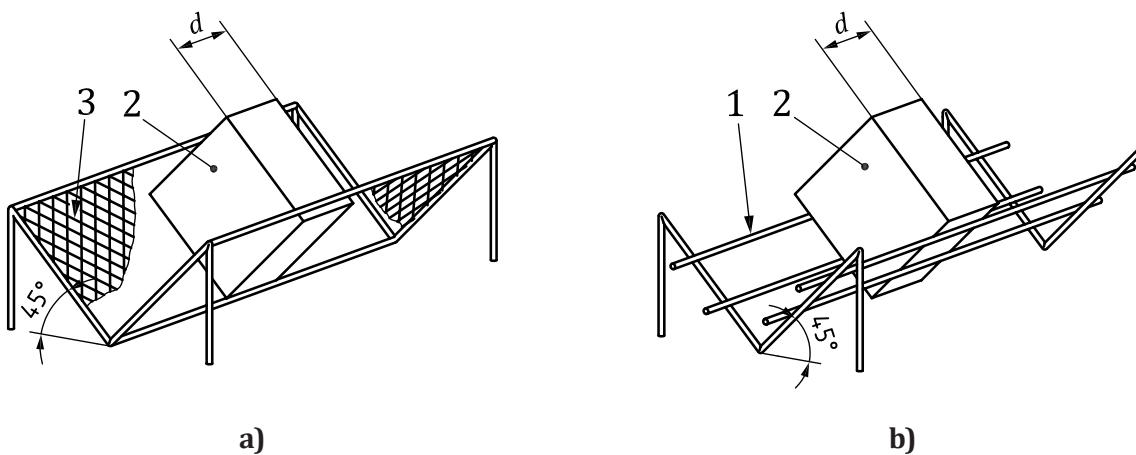
- 1 water tank
- 2 load to keep the specimen in position
- 3 test specimen

Figure 1 — Examples of partial immersion test device

5.3 Tap water, adjusted to a temperature of $(23 \pm 5) \text{ }^\circ\text{C}$. In case of dispute, deionised water shall be used.

In tropical countries, different conditions and testing conditions can be relevant. In such cases the temperature shall be $(27 \pm 5) \text{ }^\circ\text{C}$, and this shall be stated in the test report.

5.4 Equipment for drainage (examples are shown in [Figures 2 a\)](#) and [2 b\)](#)).



Key

- 1 stainless steel mesh
- 2 test specimen
- 3 perforated stainless steel

Figure 2 — Examples of suitable equipment for drainage

6 Test specimens

6.1 Dimensions of test specimens

The thickness of test specimens shall be equal to the original product thickness.

The specimens shall be prisms of square cross section having a side length of (200 ± 1) mm.

6.2 Number of test specimens

The number of test specimens shall be as specified in the relevant product standard. If the number is not specified, then at least four test specimens shall be used.

In the absence of a product standard or any other technical specification, the number of specimens can be agreed between parties.

6.3 Preparation of test specimens

The test specimens shall be cut so that they do not include product edges.

The test specimens shall be prepared by methods that do not change the original structure of the product. Any skins, facings and/or coatings shall be retained.

NOTE Special methods of preparation, when needed, are given in the relevant product standard or any other technical specification.

6.4 Conditioning of test specimens

The test specimens shall be conditioned for at least 6 h at (23 ± 5) °C. In case of dispute, they shall be conditioned at (23 ± 2) °C and (50 ± 5) % relative humidity for the time stated in the relevant product standard.

In tropical countries different conditioning conditions might be relevant. In this cases the conditions shall be at (23 ± 2) °C and (65 ± 5) % and be stated clearly in the test report.

7 Procedure

7.1 Test conditions

Testing shall be carried out at (23 ± 5) °C. In case of dispute, it shall be carried out at (23 ± 2) °C and (50 ± 5) % RH.

In tropical countries different conditioning and testing conditions might be relevant. In this cases the conditions shall be 27° C/ 65 % RH and be stated clearly in the test report.

7.2 Test procedure

The choice of the method (A or B) shall be as specified in the relevant product standard.

In the absence of a product standard or any other International or European technical specification, the method can be agreed between parties.

The dimensions of the test specimens shall be measured in accordance with ISO 29768.

7.2.1 Method A (drainage)

Weigh the test specimen to the nearest 0,1 g to determine its initial mass, m_0 .